

Module Handbook

TUK MODHB Homepage

Course WIW-LOG-TL-K-7

Transportation (2V+1U, 4.5 LP)

Course Type

SWS	Type	Course Form	CP (Effort)	Presence-Time / Self-Study
-	K		4.5 CP	
2	V	Lecture		30 h 60 h
1	U	Lecture hall exercise class		15 h 30 h
(2V+1U)			4.5 CP	45 h 90 h

Basedata

SWS	2V+1U
CP, Effort	4.5 CP = 135 h
Position of the semester	1 Sem. in WiSe
Level	[7] Master (Advanced)
Language	[EN] English
Lecturers	Gschwind, Timo, Prof. Dr. (PROF DEPT: WIW) Machate, Sarah, M. Sc. (WMA DEPT: WIW)
Area of study	[WIW-LOG] Logistics
Additional informations	Informations about the course
Lifecycle-State	[NORM] Active

Contents

- Classical variants of the vehicle routing problem
- Exact solution of tour planning problems
- Shortest path problems with resource constraints
- Heuristic solution approaches to transportation problems
- Recent trends

Literature

- Toth, P. & Vigo, D., eds. (2002). The vehicle routing problem. SIAM.
- Toth, P. & Vigo, D., eds. (2014). Vehicle routing: problems, methods, and applications. SIAM.
- Additional literature will be announced during the lecture.

Requirements for attendance (informal)

Basic knowledge of graph theory as well as linear and mixed-integer optimization.

Requirements for attendance (formal)

None

References to Course [WIW-LOG-TL-K-7]

Module	Name	Context	
[WIW-LOG-LM-M-7]	Logistics Management	WP: Obligation to choose	2V+1U, 4.5 LP
[WIW-LOG-TL-M-7]	Transport logistics	P: Obligatory	2V+1U, 4.5 LP